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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number 10/799838							
Filing Date	Mar 12, 2004						
First Named Inventor	Randy Hoffman						
Art Unit	2814	_					
Examiner Name	Long Pham	_					
Attorney Docket Number	200316548-1	フ					

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LP	20	Fu, Shelton, et 520-527.	al., "MOS and MO	SFET w	ith Transistion Met	tel Ox	kides", SPIE Vol. 26	397, pp.	
	2R	Glesbers, J.B., Microeletronic	et al., "Dry Etching Engineering, Vol. 3	of All- 5, pp. 7	Oxide Transparent 11-74 (1997).	Thin	Film Memory Trans	sistors",	
	25	Grosse-Holz, K Symp. Proc., V	.O., et al. "Semicor ol. 401, pp. 67-72	nductive (1998)	Behavior of Sb Do	oped	SnO2 Thin Films*,	Mat. Res. So	c.
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LP	30	Hoffman, R.L., 82, No. 5, pp.	et al., "ZnO-base 733-735 (Februar	d trans γ 3, 20	parent thin-film transi 1003).	istors	", Applied Physic	s Letters, Vol.	-
T	3R	Masuda, Satos and their elect (February 1, 2)	rical properties", J	arent t	hin film transistors usl of Applied Physics, V	ing Zi /ol. 9	nO as an active c 3, No. 3, pp. 162	hannel layer 4-1830	
	38	Nishi, Junya, e Appl. Phys., V	at al., "High Mobili ol. 42, Part 2, No.	ty Thir 4A, p	ı Film Transistors with p. L347-L349 (April, :	Trar 2003	nsperent ZnO Cha	nnels*, Jpn. J,	
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LP	40	Ohya, Yutaka, Jpn. J. Appl. F	et al., "Thin Film" Phys., Vol. 40, Par	Transis t 1, No	tor of ZnO Fabricated . 1, pp. 297-298 (Jan	l by (nuar)	Chemical Solution y, 2001).	Deposition*,	
	4R	Pallecchi, Ilaria Physics Letters	, et al. "SrTIO3-bi , Vol. 78, No. 15,	sed m	stal-insulator-semicon 244-2246 (April 9, 20	duct 001).	or heterostructure	s" Applied	
	45	Prins, M. W. J No. 25, pp. 36	., et al., "A ferroe 50-3652 (June 17	lectric 1 7, 1996	ransparent thin-film t	ransi	istor", Appl. Phys.	Lett., Vol. 68,	
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LP	60	Yoshida, A., "I Transactions of	Three Terminal Field in Applied Supercon	Effect ductiv	t Superconducting C ity, Vol. 5, No. 2, p	Pevice p. 28	e Using SrTiO3 Ch 192-2895 (June, 1	ennel* IEEE 995).	
	6R	Solid-State Elec	ctronics, Vol. 7, Per	rgamor	n Press, Notes pp. 7	701-7	02 (1964).		-
1	65	Anonymous, "T Disclosure, p. 4	Fransparent and/or 890 (July 1998).	memoi	ry thin film transisto	ors in	LCD's and PLEAD	" Research	
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	55	channel, a pos-	irgen, et el., "An i sible new gas sens p. 471-474 (Septe	sor dev	d gate thin-film transice" The 11th Europe 21-24, 1997).	istor an C	using SnO2 as se onference on Soli	miconducting d State	9
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